

## Supplementary materials

**Supplemental Table 1. Characteristics of T2 responders and T2 non-responders**

Characteristics	<u>T2 responders</u> Frequency (n)	<u>T2 non-responders</u> Frequency (n)	Percent (%)	P-value
Total	1183	287	19.5	
<b>Gender</b>				
Male	603	136	18.4	0.2761
Female	580	151	20.7	
<b>Age, y</b>				
18-39	473	157	24.9	<0.0001
40-59	395	74	15.8	
60+	315	56	15.1	
<b>Race/ethnicity</b>				
Non-Hispanic White	800	150	15.8	0.0015
Non-Hispanic Black	98	47	32.4	
Hispanic	196	66	25.2	
Non-Hispanic Asian	29	8	21.6	
Other or multiple	60	16	21.1	
<b>Education</b>				
<High school	46	21	31.3	0.0004
High School graduate or equivalent	215	67	23.8	
Vocational/tech school/some college	525	124	19.1	
Bachelor's degree	397	75	15.9	
<b>Marital status</b>				
Married	600	119	16.6	0.0089
Widowed, divorced, or separated	206	44	17.6	
Never married	269	81	23.1	
Living with partner	108	31	22.3	
<b>Home ownership</b>				
Owned	729	137	15.8	<0.0001
Rented	407	134	24.8	
Occupied without payment	47	16	25.4	
<b>Household income, \$</b>				
≤19,999	178	75	29.6	<0.0001
20,000-44,999	291	72	19.8	
45,000-74,999	305	59	16.2	
≥75,000	383	71	15.6	
Missing	26	10	27.8	
<b>Household savings, \$</b>				
≤4,999	442	142	24.3	<0.0001

≥5,000	708	131	15.6	
Missing	33	14	29.8	
<b>Stressors, categorical</b>				
Low (0-1)	187	55	22.7	0.8669
Medium (2-3)	450	91	16.8	
High (4 or more)	545	139	20.3	
Missing	1	2	66.7	
<b>Depressive symptoms</b>				
PHQ-9 score <10	866	193	18.2	0.0321
PHQ-9 score ≥ 10	293	89	23.3	
Missing	24	5	17.2	

Note: T1 characteristics by T2 responders and non-responders. Patient Health Questionnaire-9: PHQ-9.

**Supplemental Table 2. Bivariable models for changes in depressive symptoms by characteristics adjusting for baseline depressive symptoms scores**

	Coeff	95%	CI	P-value
<b>Gender</b>				
Male	Ref	-	-	-
Female	-0.19	-0.97	0.59	0.627
<b>Age, y</b>				
18-39	1.07	0.13	2.00	0.025
40-59	0.21	-0.52	0.95	0.571
60+	Ref	-	-	-
<b>Race/ethnicity</b>				
Non-Hispanic White	Ref	-	-	-
Non-Hispanic Black	-0.26	-1.34	0.82	0.639
Hispanic	-0.85	-2.23	0.53	0.227
Non-Hispanic Asian	-1.84	-3.14	-0.55	0.005
Other or multiple	0.30	-1.97	2.58	0.794
<b>Education</b>				
<High school	1.61	-0.67	3.89	0.167
High School graduate or equivalent	0.85	-1.29	3.00	0.434
Vocational/tech school/some college	0.33	-1.71	2.36	0.751
Bachelor's degree or more	Ref	-	-	-
<b>Marital status</b>				
Married	Ref	-	-	-
Widowed, divorced, or separated	0.69	-0.13	1.52	0.101
Never married	1.79	0.69	2.89	0.001
Living with partner	-0.02	-1.72	1.69	0.985
<b>Home ownership</b>				
Owned or being bought by you or someone you are related to	Ref	-	-	-
Rented for cash	0.91	0.09	1.72	0.029
Occupied without payment of cash rental	0.29	-3.09	3.67	0.867
<b>Household income, \$</b>				
≤19,999	2.62	1.11	4.13	0.001
20,000-44,999	1.28	0.42	2.15	0.004
45,000-74,999	0.98	0.13	1.84	0.024
≥75,000	Ref	-	-	-
<b>Household savings, \$</b>				
≤4,999	1.20	0.32	2.08	0.007
≥5,000	Ref	-	-	-
<b>Stressor count category</b>				

Low (0-1)	Ref	-	-	-
Medium (2-3)	0.52	-0.37	1.41	0.250
High (4 or more)	1.37	0.37	2.37	0.007

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Note: Models presented are individual models for each T1 characteristic adjusting for baseline depressive symptom score at T1. Change in depressive symptoms defined as PHQ-9 score at T2 minus PHQ-9 score at T1. Patient Health Questionnaire-9: PHQ-9.

**Supplemental Table 3. Weighted proportion of reporting PHQ-9 symptoms more than half the time or nearly every day at T1 and T2**

PHQ-9 symptoms	2020	2021	P-value
Little interest or pleasure in doing things	0.20	0.23	0.054
Feeling nervous, anxious, or on edge	0.20	0.21	0.212
Trouble falling or staying asleep, or sleeping too much	0.27	0.30	0.012
Feeling tired or having little energy	0.28	0.34	<0.001
Poor appetite or overeating	0.23	0.28	0.005
Feeling bad about yourself or that you are a failure or have let yourself or others down	0.15	0.19	0.003
Trouble concentrating on things, such as reading the newspaper or watching television	0.17	0.21	0.057
Moving or speaking so slowly that other people could have noticed? Or so fidgety or restless that you have been moving a lot more than usual?	0.09	0.10	0.792
Thoughts that you would be better off dead, or thoughts of hurting yourself in some way?	0.05	0.07	0.039

Note: P-value below <0.05 indicates that the difference in score between T1 and T2 is non-zero (and therefore indicates a significant difference at the p=0.05 level). Patient Health Questionnaire–9: PHQ-9.

**STROBE Statement—Checklist of items that should be included in reports of *cohort studies***

	<b>Item No</b>	<b>Recommendation</b>	<b>Page No</b>
<b>Title and abstract</b>	1	(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found	1 6
<b>Introduction</b>			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	8
Objectives	3	State specific objectives, including any prespecified hypotheses	9
<b>Methods</b>			
Study design	4	Present key elements of study design early in the paper	10
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	10-11
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up (b) For matched studies, give matching criteria and number of exposed and unexposed	11
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	12-14
Data sources/measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	12-14
Bias	9	Describe any efforts to address potential sources of bias	24
Study size	10	Explain how the study size was arrived at	10-11
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	14-16
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed (d) If applicable, explain how loss to follow-up was addressed (e) Describe any sensitivity analyses	14-16
<b>Results</b>			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram	16
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders (b) Indicate number of participants with missing data for each variable of interest (c) Summarise follow-up time (eg, average and total amount)	16
Outcome data	15*	Report numbers of outcome events or summary measures over time	16-20
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized	16-20

		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	19-20
<b>Discussion</b>			
Key results	18	Summarise key results with reference to study objectives	20
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	24
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	25
Generalisability	21	Discuss the generalisability (external validity) of the study results	25
<b>Other information</b>			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	7

\*Give information separately for exposed and unexposed groups.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at <http://www.strobe-statement.org>.